ADDENDUM #1 TO SPEC. 06-121

BLUFF ROAD LANDFILL PHASE 3 CAPPING SYSTEM PHASE 10 LINER CONSTRUCTION STORM WATER BASIN RELOCATION

City Project No. 569343, 569282 AND 569283 City of Specification No. 06-121

Addendum #1 to Spec. 06-121 for above project, bids to be opened on Wednesday, April 19, 2006 at 12:00 noon.

Attached is Addendum No. 1 as prepared by HDR.

All other terms and conditions to remain unchanged.

Dated this 14th day of April, 2006

Purchasing Department

Vince M. Mejer Purchasing Agent

ADDENDUM NO. 1 TO CONTRACT DOCUMENTS AND SPECIFICATIONS

FOR

BLUFF ROAD LANDFILL: PHASE 3 CAPPING SYSTEM; PHASE 10 LINER CONSTRUCTION; STORM WATER BASIN RELOCATION (Specification No. 06-121)

DATE OF ISSUE: April 13, 2006

TO: PROSPECTIVE BIDDERS AND OTHER INTERESTED PARTIES

THE CONTRACT DOCUMENTS AND SPECIFICATIONS, INCLUDING THE CONTRACT DRAWINGS, ARE HEREBY MODIFIED BY THE FOLLOWING ITEMS:

CHANGES TO SPECIFICATIONS

AD-1 Item 1 SECTION 02200 - EARTHWORK

- A. Page 02200-4:
 - 1. Line 9: CHANGE the order of words in the last sentence to read as follows:
 - "This shall be demonstrated by City or Engineer's lab testing."
- B. Page 02200-6:
 - 1. Line 51: Directly after this line, ADD the following:
 - "7. Where excavation and grading expose solid waste ensure that solid waste is covered by 6 inches of clean soil at the end of the day on which excavation/grading exposes such waste."

CHANGES TO DRAWINGS

AD-1 Item 2 DRAWING 01C-02, Phase 3 Capping System Details

A. On Detail 6/01C-01. MODIFY the note that reads "REGRADE AS REQUIRED FOR TRANSITION.", to read "REGRADE AS REQUIRED FOR TRANSITION.

MAINTAIN 6 IN OF CLEAN SOIL BELOW TOP OF SOLID WASTE AND BOTTOM OF GAS VENT LAYER."

AD-1 Item 3 DRAWING 03C-01, Storm Water Basin Relocation Plan and Details

A. OUTLET STRUCTURE DETAIL 1: CHANGE the top of 36" Dia. Riser elevation from "EL. 1178.50" to "EL. 1177.80".

AD-1 Item 4 DRAWING 03C-02, Storm Water Basin Relocation Sections

- A. CROSS SECTION AUXILIARY SPILLWAY SECTION A: DELETE the word "AUXILIARY" in the Section Title and in the note reading "Auxiliary Spillway Crest".
- B. CROSS SECTION PRINCIPAL SPILLWAY SECTION B: CHANGE the top of 36" Dia Perforated Riser elevation from "EL. 1178.5" to EL. 1177.80".

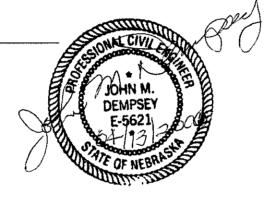
- C. CROSS SECTION PRINCIPAL SPILLWAY SECTION C: CHANGE "PRINCIPAL SPILLWAY" to read "MULTIPLE CULVERTS".
- D. PROFILE ALONG CL OF EMBANKMENT SECTION D:
 - 1. CHANGE the Future Overflow elevation from "EL. 1178.5" to "EL. 1177.80".
 - 2. DELETE the word "Auxiliary" in the note reading: "Auxiliary Spillway Overflow Crest EL. 1177.3"

ALL ITEMS IN CONFLICT WITH THE ADDENDA ARE HEREBY DELETED.

THIS ADDENDUM IS MADE PART OF THE CONTRACT DOCUMENTS AND SHALL BE NOTED ON THE PROPOSAL.

HDR ENGINEERING, INC.

John M. Dempsey, P.E.



BLUFF ROAD LANDFILL

PHASE 10 LINER CONSTRUCTION, PHASE 3 CAPPING SYSTEM and STORM WATER BASIN RELOCATION

ATTENDEES:

	NAME	REPRESENTING/ PROJECT ASSIGNMENT	MAILING ADDRESS	PHONE, FAX, EMAIL
1	Karla Welding	City of Lincoln SWO	2400 Theresa Street	402-441-7867 402-441-6685 (fax)
2	Jerry Westhoff	J. J. Westhoff Construction	700 Calvert	402-421-1225 402-421-3638 (fax)
3	Dave Rydl	City of Lincoln SWO	700 Calvert	402-441-8103 402-441-6685 (fax)
4	Darold W. Spears	ESI	Kansas City, MO	816-935-7546 816-523-0183 (fax)
5	Bill Clarke	Lessard Con. Inc.	2300 Blvd of Champions	712-252-4131 712-252-4153 (fax)
6	Keith Wilson	Wilson Const. Co.	18201 96th Street Louisville, NE	402-298-7175 402-298-7175 (fax)
7	John Dempsey	HDR Engineering	8404 Indian Hills Drive Omaha, NE	402-399-1352 402-399-1111 (fax)
8	Bob Seipold	HDR	8404 Indian Hills Drive Omaha, NE	402-399-1031 402-399-1111 (fax)
9	Gary Varley	Land Const.	5905 West 'O' Street Lincoln, NE	402-477-5263 402-477-8193 (fax)
10	Mike Sibbernsen	Commercial Contractors Equip., Inc.	PO Box 81036 Lincoln, NE 68501	402-476-1711 402-476-1712 (fax)
11	Gary Brandt	Lincoln WW&S Waste	2400 Theresa Street	402-441-7968 402-441-8735 (fax)
12	Tim Lempka	LeGrande Excavating	PO Box 22639 Lincoln, NE 68542	402-423-4076 402-423-5370 (fax)
13	Rick Farrell	Negas	Omaha	402-455-9217 402-451-2144 (fax)
14	Illegible signature	LaGrande Excavating	Andrews (1964) - 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	

Bluff Road Landfill Specification 06-121

PREBID CONFERENCE MINUTES April 11, 2006

BID OPENING DATE AND TIME:

A. Wednesday, April 19, 2006 at 12:00 Noon. See Notice to Bidders and Instructions to Bidders for submittal requirements.

DISCUSSION NOTES:

2. WORK INCLUDES:

A. Phase 10 Liner Construction, Project No. 569-282

- 1. Limited Demolition, Removal, and Salvage.
- 2. Bulk Excavation.
- 3. Monitoring well abandonment and protection of wells, piezometers.
- 4. Unsuitable soil removal and replacement.
- 5. Installation of liner system, including tie-ins to existing liner system.
- 6. Leachate management (pumping, handling, and disposal) until completion of leachate collection system and final liner construction.
- 7. Storm water management in liner areas.
- Installation of groundwater control system and pumping of groundwater until completion of permanent pumping system.
- 9. Installation of recompacted clay liner.
- 10. Installation of geosynthetic clay liner (GCL).
- 11. Installation of HDPE geomembrane liner.
- 12. Installation of geonet-geotextile composite and granular drainage layer.
- 13. Installation of leachate collection piping and connection to existing leachate line.
- 14. Installation of protective cover, geogrid and termination berms.
- 15. Access road drainage ditches construction and repair.
- 16. Erosion controls.
- 17. Contractor's Site Health and Safety Plan development and implementation.

B. Phase 3 Capping System Construction Project No. 569-343

- 1. Limited Demolition, Removal, and Salvage.
- 2. Berm removal, plywood removal, and tie-ins to existing capping and liner systems.
- 3. Protection of wells, structures, and gas probes.
- 4. Grading for capping transitions.
- 5. Installation of PVC gas vents.
- 6. Installation of geonet-geotextile composite (gas vent layer).
- 7. Installation of Recompacted Clay Layer.
- 8. Installation of HDPE geomembrane liner.
- 9. Installation of geonet-geotextile composite (drainage layer).
- 10. Installation of erosion layer, topsoil and drainage outlets.
- 11. Installation of letdown structure, terraces and berms.
- 12. Reconstruction of existing perimeter ditch.
- 13. Installation of outlet structure with trenchless construction.
- 14. Associated erosion and environmental protection controls.
- 15. Contractor's Site Health and Safety Plan development and implementation.

C. Storm Water Basin Relocation

- 1. Protection of wetland vegetation, power pole, etc.
- 2. Erosion Controls.

- 3. Limited Demolition, Removal, and Salvage.
- 4. Piezometer abandonment.
- 5. Clear and grubbing.
- 6. Excavation and stockpiling of topsoil and excess soil.
- 7. Excavate Unsuitable Soils.
- 8. Installation of embankment fill, compaction and grading.
- 9. Drainage outlet structure and associated discharge.
- 10. Modification of existing embankment, addition of drainage culverts, grade modifications, and construction of new outlet.
- 11. New fence and modifications to existing fence.
- 12. Topsoiling.

DISCUSSION NOTES:

The areas of the three (3) separate projects were noted as follows:

Phase 10 Liner - 10 Acres.

Phase 3 Cap - 15 Acres.

Storm Water Basin - 10 Acres.

3. PROPOSAL:

- 1. Use form in Contract Documents and Specifications.
- 2. Fill in all blanks
- 3. Name Manufacturers and Installers of listed items in proposal form.
- 4. Fill in bidder qualification information
- 5. Attach Bid Security

DISCUSSION NOTES:

No Discussion.

4. PAYMENTS:

- 1. Monthly Progress Payments.
- 2. Ten (10) Percent Retainage.
- 3. Conditions for reducing retainage. Subject to satisfactory performance, reduced to Five (5) Percent or an Amount Appropriate to Complete the Work at Substantial Completion.

DISCUSSION NOTES:

Payments will be administered on a Project basis for each of the three (3) separate Projects. There will be a single contract for the Project or the Projects awarded.

5. BASIS OF AWARD:

1. Award to lowest, responsive, responsible bid as noted in paragraph 12 of Instructions to Bidders and paragraph 16 in Supplemental Instructions to Bidders.

DISCUSSION NOTES:

No Discussion.

6. INTERPRETATIONS:

- 1. No Addendum have been Issued; one addendum is anticipated.
- 2. Only written addenda can modify documents.
- Questions subsequent to this meeting must be received by the Purchasing Agent, in writing by 12:00
 Noon, Wednesday April 12, 2006.
- 4. Minutes of this Prebid Conference are NOT part of the Contract Documents and will be published for information purposes only.
- 5. All requests for interpretations should be directed to City of Lincoln Purchasing Agent.

DISCUSSION NOTES:

7. SUBSTITUTIONS:

- 1. Substitutions considered after the bid in accordance with Section 01640.
- Base Bids on named manufacturers only.
- 3. Substitutions that are not "Or-Equals" must provide cost reduction incentive to the City.

DISCUSSION NOTES:

No Discussion.

8. SOIL/GEOTECHNICAL INFORMATION:

- Site geotechnical investigation of the Phase 10 Liner area and Storm Water Basin Relocation is included as an Appendix A in Contract Documents.
- Design drawings for the historic (existing) storm water basin are included as an Appendix C in Contract Documents.
- Information on existing fence and existing wells & piezometers are included in the Contract Documents.
- 4. Reports listed in Supplementary Condition SC-VII.E, page 00805-3 and 00805-4 are available for examination at landfill office.
- 5. It is Bidders responsibility to interpret and/or obtain their own data.
- 6. Contact Karla Welding at the project site to coordinate access for independent exploration.

DISCUSSION NOTES:

No Discussion.

9. PERMITS, FEES & UTILITIES:

- 1. City has NPDES (Stormwater) Permit for the Site.
- 2. Construction water available on Site at no charge from City production well; not for domestic consumption. (01060, page 5)
- 110v electrical plug-in outlet available at maintenance building. Additional electrical power required must be arranged for separately.
- 4. Contractor responsible for all other permits, fees and utilities.
- 5. Well and piezometer abandonment requires documentation of abandonment.

DISCUSSION NOTES:

It was asked if there are other permits for on-site activity required. HDR noted examples might include such things as over-the-road hauling of equipment, fuel storage facilities, confined spaces are the responsibility of the Contractor.

10. SUBCONTRACTS:

- 1. Successful Bidder-Contractor must submit names of Subcontractors.
- 2. Allow five (5) business days for review of subcontractor list before beginning subcontracted work.
- 3. Subcontractor for geosynthetic materials must be identified on Proposal Form at the time of bidding.
- Inspector of HDPE and geomembrane is authorized representative of manufacturer and shall remain
 on the Project throughout the entire construction and covering of the HDPE geomembrane (02775,
 page 2).

DISCUSSION NOTES:

No Discussion.

11. CITY BIDDING RIGHTS: (Supplemental Instructions to Bidders, Paragraph 16)

- 1. May reject any or all Bids City believes not in the best interest of the Project.
- 2. May waive informalities (irregularities).
- 3. May conduct investigations and request additional information.

DISCUSSION NOTES:

12. TIME OF COMPLETION:

- 1. Substantial Completion: Phase 10 Liner October 5, 2006; Phase 3 Capping System September 15, 2006; Storm Water Basin Relocation October 5, 2006.
- 2. Final Completion: 30 days after latest Substantial Completion of any of the three Projects.
- 3. Anticipated Start Dates (Notices to Proceed): Phase 10 Liner and Phase 3 Capping System May 15, 2006; Storm Water Basin Relocation July 15, 2006.
- 4. Liquidated Damages: Substantial Completion: Phase 10 Liner \$2,500/day; Phase 3 Capping System -\$1,000/day; Storm Water Basin -\$1000/day. Final Completion: \$500/day.
- 5. Liquidated Damages limited to the greatest single value if multiple projects are in Liquidated Damages.
- 6. Contract Documents include provisions for extending completion due to weather, including impacts related to precipitation, wind and weather deposited litter. Careful, up-front, record keeping and acknowledgement will be important in requesting schedule extensions. Weather impacts may involve either soils or geosynthetic materials.

DISCUSSION NOTES:

Item 3: The reason the Storm Water Basin Relocation has a later start is the City has applied for a 404 permit.

13. ORDER OF CONSTRUCTION (See 01060, Page1 and 2 and 01120, page 2):

- No excavation until existing liner and cap terminations are located. The need to locate these
 terminations prior to excavation is for City or Engineer to confirm limits of liner and cap system,
 acceptable design grades and geometry and to ensure subsequent excavations do not damage existing
 liner and cap system.
- 2. Construction sequence and filling limits are stipulated for the Storm Water Basin Relocation, including embankment fill and timing of removal of existing pond drainage structure.
- Phase 10 liner construction shall be first priority. Schedule for completion of Phase 10 Liner is
 critical to City's ability to provide continuous waste disposal and protect the system from frost
 damage by installing an insulating layer of waste before winter.
- Other Early Activities:
 - Test Pads; one each for Recompacted Clay Liner and Recompacted Clay Layer; others test section may be required to demonstrate construction methods are protective of critical components
 - b. Protection of Property.
 - c. Environmental Controls.
 - d. Health and Safety Plans.
 - e. Shop Drawing Approvals.
 - f. Approval of HDPE Installer & Inspector qualifications.

DISCUSSION NOTES:

No Discussion.

14. PERFORMANCE AND PAYMENT BONDS:

 Furnish on forms provided. The forms in the Contract Documents are industry standards; no substitute forms will be accepted.

DISCUSSION NOTES:

No Discussion.

15. CONSTRUCTION SCHEDULE:

- 1. Due 5 days after Award of Contract.
- 2. Bar Chart or Critical Path Network. Either form of schedule is expected to identify a critical path.
- 3. Evaluate and update as necessary every 2 weeks.

DISCUSSION NOTES:

16. SCHEDULE OF VALUES (See Section 00805, Pages 7 and 8):

- 1. Required for Lump Sum Bid Item(s).
- 2. Approved prior to first progress payment; no progress payments until approved.

DISCUSSION NOTES:

No Discussion.

17. SUBMITTALS (SHOP DRAWING) LIST AND SCHEDULE (See Section 01340):

- 1. Submittal schedule to be submitted and accepted within 5 days of Notice to Proceed.
- 2. Initial Liner submittals within 10 days of Notice to Proceed.
- 3. City is entitled to reimbursement for multiple submittals of same Shop Drawing, per Contract Documents.

DISCUSSION NOTES:

No Discussion.

18. TESTING:

- City to provide moisture-density relationships (proctor) for cohesive materials and in-place moisture-density tests
- 2. City will provide on-site concrete strength tests.
- 3. Contractor pays for failing tests.
- 4. Contractor provides material prequalification testing for off-site materials.
- 5. Contractor provides Total Thickness testing.
- 6. Contractor provides HDPE Liner and Geosynthetics testing.
- 7. City may perform independent testing on HDPE and Geosynthetics. City's results will govern.

DISCUSSION NOTES:

No Discussion.

19. SURVEYING (GC's at XV. E):

- 1. Contractor to survey and locate all grades, structures, leachate lines, berms, terraces, letdowns, gas vents, and construction features. Establish layouts and elevations.
- 2. No stakes or penetrations in liner materials.
- 3. City will perform measurements for unit price payments.
- 4. City will perform <u>verification</u> surveys to confirm elevations of Base Grades, Recompacted Clay Liner, Granular Drainage Layer, Protective Cover Soils, Grades of Intermediate Cover, completed Recompacted Clay Layer, Erosion Layer and other verification grades, thickness, and structures. Contractor to pay for survey if not to lines and grades when City surveys.

DISCUSSION NOTES:

Question was asked about frequency of thickness testing. Reference was made to Section 02800 which states 1 per 5 acres.

Item 4: Also, City QA Surveys and Thickness Verification Surveys will be conducted when Contractor notifies City/Engineer that work is at design elevations or thicknesses.

20. PRECONSTRUCTION CONFERENCE:

- 1. To be scheduled after Award and prior to starting work.
- Contractor's Project Manager, Project Superintendent and Subcontractors Representatives (including Testing Agency(s)) required to attend.

DISCUSSION NOTES:

21. PROGRESS MEETINGS:

- 1. Held monthly or more frequently, if needed.
- 2. Required attendance: Contractor's Project Manager, Contractor's Project Superintendent, and Subcontractor's as appropriate to Work in progress.

DISCUSSION NOTES:

No Discussion.

22. PRE-INSTALLATION CONFERENCES:

- 1. Stipulated for all geosynthetics to promote smooth initiation of installation and QA/QC activities.
- All geosynthetics installers (foreman) must attend pre-installation conference along with Contractor's Superintendent.
- 3. HDPE Installer will conduct HDPE pre-installation conference.
- 4. Engineer will conduct remaining geosynthetic pre-installation conferences.

DISCUSSION NOTES:

No Discussion.

23. SITE CONDITIONS:

- Review limits of space for field office, stockpiles, drainage ditches, location of temporary and permanent structures, and storage and fabrication areas.
- Access/egress. Do not impede landfill and leachate loadout facility access; provide City access for all waste operations; and, do no obstruct heavy equipment access roads.
- 3. Plan for Parking and Storage.
- 4. Hours of Access (01060, Page 5). Maintain site secure.
- 5. Protection of property, wells, piezometers, gas probes, fence, leachate piping, roads, wetland type vegetation, etc.
- 6. See Section 01560 on Environmental Protection and Special Controls and 01601 on Job Conditions
- 7. The City does not maintain soil scraper haul roads, to the landfill for high-speed operations.

DISCUSSION NOTES:

24. HEALTH AND SAFETY CONSIDERATIONS:

- 1. Review Section 01601.
- 2. No smoking in liner and capping areas, existing waste areas, and where potential environmental exposures may occur.
- 3. Leachate seeping could occur with excavations and precipitation.
- 4. Note health and safety plan requirements and possible presence of harmful or dangerous substances.
- 5. Health and safety plan must be prepared by a Certified Safety professional.

DISCUSSION NOTES:

No Discussion.

25. PROJECT CONDITIONS AND SPECIAL CONSIDERATION:

- 1. Maintain Access. Flagman at crossings or when equipment operate in parallel directions with site roadways used by landfill users/waste handlers. (Section 01601, Page 1,Part 1.2)
- 2. Wind and Weather-Related Litter Removal. (01060, Pages 4 and 5; Part 1.7)
- 3. Lost Days due to wind and Weather-Related Litter. Allow up to 8 days of lost time for geosynthetic materials and other component installation due to wind blown litter. (01060, Page 5, Part 1.7)
- 4. Removal and Replacement of Litter Fences and Resulting Clean-up. (01060, Page 5, Part 1.7)

DISCUSSION NOTES:

26. RECOMPACTED CLAY LINER (02200):

- 1. Glacial till material from designated on-site borrow area processed to 1 inch particle size. Excessively wet material may not be used.
- 2. Free of waste. Compacted to specified density and within specified range of moisture content, and hydraulic conductivity, are criteria for construction.
- 3. Protection from drying, freezing, weather, etc.
- 4. Test pad to demonstrate equipment, methods, and production.
- 5. Suitability to accept HDPE must be certified.

DISCUSSION NOTES:

No Discussion.

27. RECOMPACTED CLAY LAYER (02200):

- 1. Glacial till or colluvial material from designated on-site borrow area.
- 2. Free of waste. Compacted to specified density and within specified range of moisture content, (not hydraulic conductivity), are criteria for construction.
- 3. Protection from drying, freezing, weather, etc.
- 4. Test Pad.
- 5. Suitability to accept HDPE.
- 6. The "recompacted clay layer" is below the HDPE, as such the Inspector is only required to be present and certify that the finish product is suitable for the installation of the HDPE; they are not required to be present during the intermediate construction of the layer.

DISCUSSION NOTES:

No Discussion.

28. REGRADING OF INTERMEDIATE COVER FOR CAPPING:

- 1. Maintain cover on waste-daily.
- 2. Minimum 6 inches of soil below gas venting layer.
- 3. Note grading guidelines and slopes on drawing notes.
- 4. Connect to existing geosynthetics and HDPE geomembrane located by test pits.
- 5. Note ditch and fence relationship to cap termination.

DISCUSSION NOTES:

Question: Will daily cover be installed by City?

Response: Yes, in areas where City is doing the grading. Contractor will need to provide where Contractor grading exposes waste, e.g., cap transition points.

29. HDPE GEOMEMBRANE (02775):

- 1. Smooth and textured.
- 2. HDPE requires certified installer.
- 3. Importance as environmental protection feature.
- 4. Protection (wind, access, site conditions, etc.).
- 5. Certification and Acceptance program.
- 6. Role of Inspector (02775, page 3).
- 7. Testing and Independent Testing Laboratory (02775, page 3).
- 8. Warranties do not deviate from specifications.

DISCUSSION NOTES:

Item 5: HDR recommended Bidders review HDPE Supplier and Installer Certifications with Suppliers and Subs to reinforce with them that no deviations from the forms included in the Bidding and Contract Documents will be approved.

30. EROSION LAYER AND PROTECTIVE SOIL COVERS:

- 1. Clean, non-granular on-site material.
- 2. Importance as these layers as protection feature for HDPE geomembranes and drainage layers.
- 3. Importance of Erosion Layer as vegetative support feature (minimize use of glacial till (02200, page 4)).

DISCUSSION NOTES:

Survey topography on Drawings for liner area has been complete in last 60 days and City has not operated in the area since.

31. TOPSOIL:

- 1. Topsoil to be applied in thickness and tolerance specified
- 2. Applied above the specified grades for the Erosion Layer. Note special grading at storm water pond embankment overflow.

DISCUSSION NOTES:

Grassing is not part of the contract.

Drawings reflect finished grades before topsoil installation. The one exception is at the dam spillway where the final grade must be exact and thus reflects the finished topsoil elevation.

Question: The document doesn't state stockpile excess soils "on-site."

Response: HDR directed question to Drawing 00G-01 where stockpile locations are identified.

32. LEACHATE HANDLING:

- 1. Importance of Leachate Management. See Section 01560, page 3.
- 2. Minimize potential for storm water to enter the leachate collection system or contacting waste and becoming leachate.
- 3. Quantities are highly variable; Contractor has 24-hour per day, 7 day per week responsibility.

DISCUSSION NOTES:

33. TOPICS FROM THE FLOOR:

There will be a full-time representative of Engineer during construction.

One Bidder read the requirements of Section 00101, Paragraph 10.2.1. HDR noted that this applies when general contractor subcontracts liner construction.

Question was asked if quantities of stockpiled topsoil have been verified to be adequate. HDR stated that an estimate was made that suggests stockpiled quantities are adequate and that with the quantities to be stripped in sediment pond area HDR is confident quantities are more than adequate.